



UNITED STATES PATENT AND TRADEMARK OFFICE

gjv
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,864	08/22/2003	Gerardo Arayata Recinto		1863
7590	09/01/2006		EXAMINER	
Gerardo Recinto 33 Union Square #417 Union City, 94587			CHAVIS, JOHN Q	
			ART UNIT	PAPER NUMBER
			2193	

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,864	RECINTO, GERARDO ARAYATA	
	Examiner	Art Unit	
	John Chavis	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 22 August 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-17 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-17 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. **The claimed invention (for example, see claim 1) is directed to non-statutory subject matter. The claimed invention is not considered to be a process (for example, a method of executing), a machine (for example, means for executing), a manufacture (a computer program product stored on a computer readable medium) or a composition of matter. Therefore, it does not fit into any of the statutory classes specified above.**

A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See *In re Warmerdam*, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also *Schrader*, 22 F.3d at 295, 30 USPQ2d at 1459. Office personnel have the burden to establish a *prima facie* case that the claimed invention as a whole is directed to solely an abstract idea or to manipulation of abstract ideas or does not produce a useful result. Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101. **It is clear that the inventive concept is not a process, since no specific method steps are specified. Furthermore, it is not clear what practical application is provided for via the claimed invention.**

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural

phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material." Abstract ideas, Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759, or the mere manipulation of abstract ideas, Schrader, 22 F.3d at 292-93, 30 USPQ2d at 1457-58, are not patentable. Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. **The applicant's claims appear to be merely abstract ideas or merely non-functional descriptive material; since, the applicant merely claims a framework for use in code unit development. Nothing specifically indicates that the framework is used or how it is used. The claim merely indicates that it could be or is capable of being used. Then, he goes on to claim a listing of elements that may**

or may not (broadest reasonable interpretation) be related. Therefore, no specific functionality (i.e., a process) or means for providing a specific functionality (i.e., a machine) is provided for. The applicant mentions an authoring engine and a visual representation engine in the claims; but, nothing in the specification identifies what the items are (hardware or software). The applicant mentions an instrumentation and an execution engine; however, nothing indicates that the two are related to the engines claimed. Therefore, both items are considered unutilized software (non-functional) and in an of itself non statutory. The definitions and interfaces are considered non-functional descriptive material and since each of the items appear unrelated, the claim (claim 1) as a whole is considered non-functional.

Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make it statutory. Such a result would exalt form over substance. *In re Sarkar*, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must

be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also *In re Johnson*, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under the copyright law.

The Courts in Chakrabarty has read the term manufacture' in §101 in accordance with its dictionary definition to mean the production of articles for use from raw materials prepared by giving to these materials new forms, qualities, properties, or combinations whether by hand labor or by machinery." **Nothing appears to be produced via the applicant's framework and listing of non related elements. That is, a program product does not appear to be claimed.**

Apart from the utility requirement of 35 U.S.C. 101, usefulness under the patent eligibility standard requires significant functionality to be present to satisfy the useful result aspect of the practical application requirement. See *Arrhythmia*, 958 F.2d at 1057, 22 USPQ2d at 1036. Merely claiming nonfunctional descriptive material stored in a computer-readable medium does not make the invention eligible for patenting. For example, a claim directed to a word processing file stored on a disk may satisfy the utility requirement of 35 U.S.C. 101 since the information stored may have some "real world" value. However, the mere fact that the claim may satisfy the utility requirement of

35 U.S.C. 101 does not mean that a useful result is achieved under the practical application requirement. The claimed invention as a whole must produce a "useful, concrete and tangible" result to have a practical application. **It is not clear how useful specific pieces of unrelated non-functional descriptive material can be.**

The other independent claims (claims 9 and 15) are broader than claim 1 and have the same type of problems as claim 1 and are therefore rejected for the same reasons as claim 1. The dependent claims (2-8, 10-14 and 16-17) are not considered to correct the problems that exist with it's respective parent claim. Therefore, each dependent claim (claims) is rejected as it's respective parent claim.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it is longer than 150 words and it is not considered clear and concise because it contains legal terminology (such as, "said domain"). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Klinker (5,590,271).

Claims

1. A framework for use in Code Units development specially useful in Visual Programming development environments, the framework comprising:

Code Units authoring engine;

a plurality of Code Units definitions;

a plurality of implementations for each Code Units definition;

Code Units Visual representation engine;

Domain specific Code Units Visual

Klinker

See the abstract and the title of the invention.

Since the applicant does not define this feature in the specification, it is considered he is relying on information known in the art at the time of the invention. Furthermore, see the first and last means of Klinker's claim 4 in col. 12, which provides for creating and formatting documents (authoring).

See col. 1 lines 35-50 and col. 4 lines 29-33.

See the last means of Klinker's claim 4.

See col. 4 lines 57-67.

See col. 5 lines 33-47 and col. 8 lines 45-50.

programming interfaces.

2. The framework of claim 1
wherein user-defined Code Units'
implementations are the high-level
API of a programming domain.

See col. 5 lines 32-36.

3. The framework of claim 1
wherein Code Units definitions
have user-definable and
assignable Visual representations
and/or Model entities for use for
either or both Visual Programming
and/or Model based developments.

" " " "

4. The framework of claim 1
wherein user-defined (different)
Domain dependent Code Units
implementation (API) instances
can comprise partly or in whole
user-defined visually created
program(s).

" " " "

5. The framework of claim 1
wherein sets of Code Units for
different Domains can be (re)used
and/or combined to form the
available "templates" for Visually
creating programs encompassing
different programming Domains.

The purpose of a framework is to
enable reuse. Furthermore, the user
selection specified in col. 5 lines 33-
36 indicates the reuse feature.

6. The framework of claim 1
wherein implemented Code Units
can be visually extended and/or
combined to provide new
functionalities thereby, yielding
new set(s) of Code Units.

" " " "

7. The framework of claim 1
wherein framework
implementation facilitates
Domain dependent Code Units
authoring by providing the
standard "contract" and relevant

It is not clear what a standard
"contract" is; since, it is not clear
where the feature is described in
the specifications. Therefore, the
claim is rejected as claim 1.

Authoring engine necessary for integrating support for the being authored Domain.

8. The framework of claim 1 wherein framework facilitates some form of validation of visually created designs and programs providing visual designers and programmers a "before execution time" tool capability to debug and/or correct visual artifacts' Attributes or parameters and to synchronize to reflect changes done to the Code Units API.

The validation feature also is not clear in the specifications. However, in view of its visual aspect, it is considered supported by the user merely viewing his input to determine if his input is as intended. The other features such as validation is also merely mentioned in the specification as something that may be offered; however, nothing indicates who, What, when, where, or how the feature is offered. Therefore, it is merely considered a desired result that is merely mentioned and not taught by the specifications, see section [0032]. Furthermore, non implemented features are not entitled patentable weight. Again, the feature is considered taught by a user merely viewing his input for correctness and therefore considered inherent in Klinker's system.

In reference to claims 9-15 and 17 are rejected as claim 1. Note that the display module provides for automatically adapting, col. 3 lines 24-27. Furthermore, it is not clear which portion of the application provides for anything automatic or dynamic. The feature is merely mentioned in claims 9-12 and is not mentioned or described at all in the specifications.

Nothing in the specifications provide for the integration of code units on different platforms or on different languages. Unsupported features are not entitled patentable weight and therefore the features of claim 16 are considered provided for in the

rejections above. Merely indicating that a user can modify code for different platforms is not considered sufficient to provide for the feature, see the applicant's section [0015]

"User(s) implement Code Units to abstract into high-level functions or API a specific programming Domain. Implementation is written on a platform supported by the Framework or on a platform yet to be supported. In the latter case, user then will need to extend the Instrumentation and Execution Engine of the Framework to support the new platform so (s)he may implement the Code Units on it. User can write the Units on a supported language of the supported platform".

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 8:00am-4:30pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC



John Chavis
Primary Examiner AU-2193